Inside Wallops

National Aeronautics and Space Administration
Goddard Space Flight Center
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On The Move: NASA Antarctic Balloon Buildings Equipped With Skis for Mobility

by Steven Profaizer, Antarctic Sun staff

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Construction crews working to complete NASA's new long-duration balloon facility have a longer drive to work.

The six buildings, built downhill from McMurdo Station during the winter, have been moved to their new home almost five miles away at Williams Field.

Each of the buildings is on large skis designed to make them mobile. Starting in late September, the buildings were pulled one-by-one behind D-8 Caterpillar tractors in a slow parade to the airfield. The last one was put into place Oct. 14.

"This is a huge improvement to [the facilities] the program had," said Linda Waterhouse, project manager. "The buildings were old, and these are nice, new and bigger. It's exciting for [the scientists] because it means they can fly bigger payloads, and that's what it's all about for them - the science."

The buildings were constructed near McMurdo and relocated to Williams Field because of the advantages associated with conducting the large-scale project close to station. They were originally designed to be mobile to save money and resources after the facility is in use.

"Historically, these buildings had to be dug out every year," Waterhouse said. "It took several weeks, a lot of people and a lot of money every year to dig them out."

At the end of the summer season, workers will be able to free the buildings from where they are currently anchored and move them onto snow berms, where they will be re-anchored for storage. This will eliminate the need to excavate them at the end of every winter.

The two largest buildings, at 39 feet high by 50 feet long, are in an entirely different weight class than structures typically moved by this method.

"We had a lot of people question whether we could move buildings this large, but we had done all the engineering analyses and felt we could do it," Waterhouse said.

A reoccurring problem Waterhouse found is that the skis will often freeze to the snow after sitting still and immobilize the building.

"People have used a lot of different methods to free the skis from the ice," Waterhouse said. "Most of them are pretty harsh and have a possibility of damaging the building, such as banging the building or putting explosives under the skis to break the bond."

Waterhouse said she wanted to come up with a less destructive and more effective way to free the buildings. Her answer was to create heated skis. When it's time to move the buildings, the skis are warmed to melt the ice cementing the buildings in place.

Frozen skis were not the only obstacle the team had to overcome. The buildings were constructed during the winter months, when weather is always a force to contend with.

"The largest challenge was probably constructing the buildings in the extreme weather conditions encountered during the winter," said Bill Marshall, construction coordinator for the project through the relocation of the buildings.

Wallops Awards Ceremony & Holiday Party

This Friday, December 16
2:30 p.m.
Building D-10 (Gym)

The Voices of Wallops will perform.

The Wallops Exchange and Morale Association Executive Board invites all Wallops employees to a Holiday Party in Building F-3, the Rocket Club, immediately following the Awards Ceremony.

Music by JustJazz begins at 5 p.m.

Wallops Shorts.....

In the News
Eastern Shore Post, "AMS Students Challenged to Soar"

Eastern Shore News, "Letting Students Have Their Space"

Launch
A NASA Terrier-Orion sounding rocket was launched from Wallops Island on December 10. The reimbursable mission was conducted for the Defense Advanced Research Projects Agency, (DARPA). Libby West, NASA Range and Mission Management Office, was the mission manager.

Wallops Children's Christmas Party

Hosted by the Wallops Black History Club

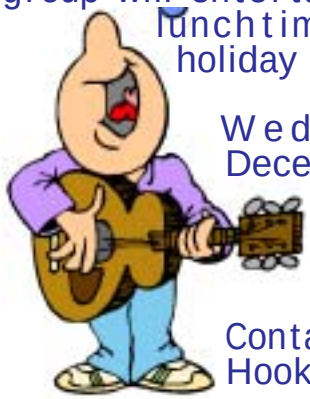
Thursday, December 22
6 - 9 p.m.
Cropper Center

For children ages 5-16 and guests, who are sponsored by any WEMA member

The deadline for registration is December 16.

To register, contact one of the following: Dave Smith, x4632; Sandra Banks, 2526; Cheryl Johnson, x1607; Dean Carroll, x1992

Wallops own Unplugged group will entertain you at lunchtime with holiday favorites.



Wednesday, December 21
Building E - 2 / Cafeteria

Contact: Owen Hooks, x1941

Confined Space Entry Worker Training

8 a.m. to noon
December 20

Building E-104, Room 310

Registration forms can be found at: http://www.wff.nasa.gov/%7Ecode803/flyers/CS%20Entry%20Worker%20Flyer1.DOC

This course is offered at no cost to all NASA and contractor employees.

Personnel interested in attending need to complete and submit a training registration request or contact Marvin Bunting at marvin.n.bunting.1@gsfc.nasa.gov or call x2030.

Holiday Sing-A-Long

December 15

Building F-3 Rocket Club

5 p.m. or thereabouts

Share some Holiday Cheer with friends and co-workers.... and sing your favorite holiday carols to celebrate the season.

Contact: Linda Wiles, x1173

Recent increases in energy costs has placed a focus on the conservation of resources. When you leave your office, remember to turn off the lights. We often spend large portions of our work day outside our office space, leaving the light on in our office.

It may seem like a small contribution, but collectively, something as simple as turning off office lights can make a large difference in our energy consumption.

Please remember to conserve and have a Happy Holiday.

Wallops Energy Management Team

We're Looking for Snow in January *by Ted Wilz, Senior Meteorologist*

So, what's the weather usually like along the Eastern Shore in January?

High temperatures are usually in the mid to upper 40's at the beginning of the month. By month's end they are in the low to mid 40's. Low temperatures start out in the low 30's, and get even colder by the end of the month when they are usually in the mid to upper 20's.

The record high temperature for January occurred on January 30, 2002, when we reached a balmy 74 degrees. In contrast, the all time record low for the month occurred on January 16th, 1965, when we reached a frigid minus 4 degrees.

We average 3.15 inches of rain during January with measurable precipitation usually occurring on 10 days. We also average just over three inches of snow fall. January typically is the month we see the most snow.

The staff at the WFF Weather Office wishes everyone a joyous, peaceful and safe holiday season.

Christmas at the Exchange

Stop by and check out gift ideas for your Christmas shopping.

Make a purchase, show your WFF badge and you will be eligible to enter a drawing for one of two great give-away bundles.

Drawing to be held on December 19 at 1 p.m.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

Editor Betty Flowers
Asst. Editor Rebecca Hudson